

Nuclear Security Summit Seoul 26-27 March 2012

National Progress Report India

- 1) **International Legal Instruments:** India is party to all the 13 universal instruments accepted as benchmarks for a State's commitment to combat international terrorism. India is party to the Convention on the Physical Protection of Nuclear Material and is amongst the few countries which have also ratified the 2005 amendment to the Convention. India looks forward to early entry into force of the 2005 Amendment. India is also Party to the International Convention for the Suppression of Acts of Nuclear Terrorism. India supports efforts for promoting the universality of these two Conventions.
- 2) **International Atomic Energy Agency:** India has consistently supported IAEA's central role in facilitating national efforts to strengthen nuclear security and in fostering effective international cooperation. India is a member of the IAEA Commission on Nuclear Safety Standards and the Advisory Group on Nuclear Security. India has been actively involved in the preparation of the Nuclear Security Series documents produced by the IAEA. India has actively contributed to IAEA's Action Plans on Nuclear Security, including third plan for 2010-2013. India as a partner to the IAEA-US Regional Radiological Security Partnership (RRSP) has been organizing international training courses in India under the aegis of the IAEA. India offered assistance through the IAEA for search and recovery of orphan radioactive sources in countries which were unable to effectively deal with them and had sought such assistance. India commends the Agency's efforts to develop a Nuclear Security Information Portal and its efforts in developing a comprehensive set of guidance documents under the Nuclear Security Series. We support the fifth revision of the recommendations contained in INFCIRC/225. We look forward to sustainable Agency activities in the area of nuclear security training and education and appreciate the assistance provided by the Agency to educational institutions in the area of Nuclear Security. India is a participant in the IAEA's Illicit Trafficking Database (ITDB), which was established in 1995 and disseminates information on confirmed reports about illicit trafficking and other unauthorized activities and events involving nuclear radioactive materials to the States. India has been supportive of the 2003 IAEA Code of Conduct on the Safety and Security of Radioactive Sources and voluntarily adopted its provisions. India has also conducted 9 regional training seminars on nuclear security in cooperation with the IAEA. Conclusion of Practical Arrangements between GCNEP and the IAEA would reinforce India's cooperation with the Agency.
- 3) **UN and other mechanisms:** Since 2002, India has piloted a resolution at the United Nations General Assembly on measures to prevent terrorists gaining access to Weapons of Mass Destruction. This resolution has been adopted by the General Assembly by consensus. India fully supports the

implementation of United Nations Security Council Resolution 1540, its extension resolution 1977, and the United Nations Global Counter Terrorism Strategy. India is also a party to Global Initiative to Combat Nuclear Terrorism and has participated in its working groups on nuclear detection, nuclear forensics and response and mitigation. While nuclear security is being addressed at different foras, there is need to ensure that these efforts are mutually complementary and reinforce the related activities of the IAEA. We also cooperate with the Interpol's Radiological and Nuclear Terrorism Prevention Unit and the World Customs Organization. India participated in the High Level Meeting called by the UN Secretary General on Nuclear Safety and Security on 22 September 2011.

- 4) **National legal framework :** The Indian Atomic Energy Act 1962 provides the legal framework for securing nuclear materials and facilities. Amendments to this Act are under consideration to further strengthen the legal basis for nuclear security measures. In June 2005, India enacted the Weapons of Mass Destruction and their Delivery Systems (Prohibition of Unlawful Activities) Act, 2005. Updating of the export control lists and related regulations are undertaken as a continuous ongoing process. India has adhered to NSG Guidelines and has expressed interest in full membership of the NSG and other international export control regimes. India is taking a number of measures to strengthen nuclear security. The Government has introduced a bill in Parliament for the establishment of an independent Nuclear Safety Regulatory Authority which will also enhance oversight of nuclear security and strengthen synergy between safety and security.
- 5) **Reducing Nuclear Material:** With regard to minimization of use of civilian HEU, the enriched uranium based fuel in the APSARA reactor was placed in a safeguarded facility in December 2010. APSARA will use indigenous fuel which is not high enriched uranium. However, there is a growing demand for large-scale production of isotopes for a range of applications- healthcare, industry, food and agriculture. India's three stage nuclear programme is based on a closed nuclear fuel cycle, the principle of 'reprocess-to-reuse' and ensuring control over nuclear material at all stages. It is also important that technology is continually upgraded to develop nuclear systems that are intrinsically safe, secure and proliferation resistant. We have recently developed an Advanced Heavy Water Reactor based on Low Enriched Uranium and thorium with new safety and proliferation-resistant features.
- 6) **International Cooperation:** India has close cooperation with the IAEA's Programme of Action for Cancer Therapy (PACT). India has signed tripartite Agreements with IAEA and Sri Lanka and Namibia to donate our indigenously developed Cobalt teletherapy machine (Bhabhatron II) to these two countries as a step towards affordable treatment of Cancer. A similar machine was donated to Vietnam in 2008.
- 7) **Global Centre for Nuclear Energy Partnership (GCNEP):** At the first Nuclear Security Summit, India announced that it would establish a

Global Centre for Nuclear Energy Partnership. We visualize this to be a state of the art facility based on international participation from the IAEA and other interested foreign partners. (Cooperation MOUs/Practical Arrangements have been concluded with some countries and the IAEA). To begin with, the Centre will consist of four Schools dealing with Advanced Nuclear Energy System Studies, Nuclear Security, Radiation Safety, and the application of Radioisotopes and Radiation Technology in the areas of healthcare, agriculture and food. The Centre will conduct research and development of design systems that are intrinsically safe, secure, proliferation resistant and sustainable, as we believe such technological solutions will strengthen nuclear security in the long run. The Centre will carry out research and development in radiation monitoring including development of detectors and nuclear emergency management. The Centre will also have state of the art training facilities for Indian and international participants and research by Indian and visiting international scientists. We are interested in development and conduct of courses in association with interested countries and the IAEA. An “off-campus” training course on Physical Protection was organized under GCNEP auspices in November 2011 for 25 participants, including 17 foreign nationals. Further courses planned for 2012 include: Prevention, Preparedness and Responses involving malicious acts with radioactive materials, Medical Management, Safeguard Practices etc.

- 8) **Nuclear Security Summit Process:** India supports implementation of the Washington Summit Communiqué and Work Plan. India contributed to the NSS process, including by hosting a meeting of the Sherpas in New Delhi 16-17 January 2012.